# SEQUENCE PROTOCOL

<110> Rhein Biotech Gesellschaft für neue biotechnologische Prozesse und Produkte mbH

<120> Nucleic acid molecule, comprising a nucleic acid coding for a polypeptide with chorismate mutase activity

<130> P30558-01996

<140>
<141>

<160> 3

<170> PatentIn Ver. 2.1

<210> 1
<211> 843
<212> DNA
<213> Hansenula polymorpha

<400> 1
atggacttta tgaagccaga aacagtgctg gaccttggca acattagaga tgccttggtc 60
cggatggagg atacgatcat cttcaacttt atcgagcggt cgcagttcta tgcgtcgccc 120
tcggtataca aagtcaacca gttccctatt cccaacttcg acggctcgtt cttggactgg 180
ctgttgtcgc agcacgagcg aatccattcg caggtgagga gatacgacgc gccagacgag 240
gtgccttttt tccccaacgt gctggaaaaa acgtttctgc ccaagatcaa ctacccatcg 300
gtgctagcct cctacgcgga tgaaatcaac gtcaacaaag agatactcaa gatctacacg 360
tcagagatag taccaggaat agctgcaggc agcggagagc aggaggacaa ccttggctcg 420
tgcgcaatgg ccgacatcga gtgcctgcag tcgctatcca gaagaatcca ttttggccgt 480
tttgtcgcag aggctaaatt tatcagtgag ggggacaaga ttgtggatct gatcaaaaag 540
agagatgtgg aaggcattga ggcgctcatc acaaacgccg aggtcgaaaa acggatcttg 600
gacagacttc tggagaaggg aagggcgtat ggaacagacc cgacactaaa gttcacgcag 660
cacattcaga gcaaggtgaa gcccgaggtg attgtgaaaa tctacaagga tttcgtgatt 720
ccgctcacga agaaggtcga agtcgactac ttgctgagac ggctggagga cgaggaggac 780
gatgatgcga cgcagaaaag cggcggctac gttgaccggt ttctctcctc tggcttgtac 840
tag 843

<210> 2
<211> 280
<212> PRT
<213> Hansenula polymorpha

<400> 2
Met Asp Phe Met Lys Pro Glu Thr Val Leu Asp Leu Gly Asn Ile Arg
1 5 10 15

Asp Ala Leu Val Arg Met Glu Asp Thr Ile Ile Phe Asn Phe Ile Glu
20 25 30

Arg Ser Gln Phe Tyr Ala Ser Pro Ser Val Tyr Lys Val Asn Gln Phe
35 40 45

Pro Ile Pro Asn Phe Asp Gly Ser Phe Leu Asp Trp Leu Leu Ser Gln
50 55 60

His Glu Arg Ile His Ser Gln Val Arg Arg Tyr Asp Ala Pro Asp Glu

65 70 75 80

Val Pro Phe Phe Pro Asn Val Leu Glu Lys Thr Phe Leu Pro Lys Ile
85 90 95

Asn Tyr Pro Ser Val Leu Ala Ser Tyr Ala Asp Glu Ile Asn Val Asn
100 105 110

Lys Glu Ile Leu Lys Ile Tyr Thr Ser Glu Ile Val Pro Gly Ile Ala
115 120 125

Ala Gly Ser Gly Glu Gln Glu Asp Asn Leu Gly Ser Cys Ala Met Ala
130 135 140

Asp Ile Glu Cys Leu Gln Ser Leu Ser Arg Arg Ile His Phe Gly Arg
145 150 155 160

Phe Val Ala Glu Ala Lys Phe Ile Ser Glu Gly Asp Lys Ile Val Asp
165 170 175

Leu Ile Lys Lys Arg Asp Val Glu Gly Ile Glu Ala Leu Ile Thr Asn
180 185 190

Ala Glu Val Glu Lys Arg Ile Leu Asp Arg Leu Leu Glu Lys Gly Arg
195 200 205

Ala Tyr Gly Thr Asp Pro Thr Leu Lys Phe Thr Gln His Ile Gln Ser
210 215 220

Lys Val Lys Pro Glu Val Ile Val Lys Ile Tyr Lys Asp Phe Val Ile
225 230 235 240

Pro Leu Thr Lys Lys Val Glu Val Asp Tyr Leu Leu Arg Arg Leu Glu
245 250 255

Asp Glu Glu Asp Asp Asp Ala Thr Gln Lys Ser Gly Gly Tyr Val Asp
260 265 270

Arg Phe Leu Ser Ser Gly Leu Tyr
275 280

<210> 3
<211> 1655
<212> DNA
<213> Hansenula polymorpha

<220>
<221> gene
<222> (1)..(1655)
<223> 1,8 kb genomic DNA-fragment from Hansenula polymorpha

<400> 3
cccggcccaa tgccagcaat atggagacgt ttaggcagaa taggcgttcc atacttctca 60
cgctgcttgt tgccaccgga atatacaccg cattgcagtt tgcacacatc atactatatg 120
acgattacat tggcggaacg tatcgcgagt cgctcacgag acgcattaga atgacagaga 180
aatcgcgaaa cgaccttata gacgcacgtg aaaactacgg gtttggaggc agcaaggagg 240

agcgaatcca gcggtttttg tggttcagac atctttcgtg gcttttaggc gaggataagc 300
gaacttgagg agcgtttttt ttttcctgtt tagtttttgt aggtatggac tttatgaagc 360
cagaaacagt gctggacctt ggcaacatta gagatgcctt ggtccggatg gaggatacga 420
tcatcttcaa ctttatcgag cggtcgcagt tctatgcgtc gccctcggta tacaaagtca 480
accagttccc tattcccaac ttcgacggct cgttcttgga ctggctgttg tcgcagcacg 540
agcgaatcca ttcgcaggtg aggagatacg acgcgccaga cgaggtgcct tttttcccca 600
acgtgctgga aaaaacgttt ctgcccaaga tcaactaccc atcggtgcta gcctcctacg 660
cggatgaaat caacgtcaac aaagagatac tcaagatcta cacgtcagag atagtaccag 720
gaatagctgc aggcagcgga gagcaggagg acaaccttgg ctcgtgcgca atggccgaca 780
tcgagtgcct gcagtcgcta tccagaagaa tccattttgg ccgttttgtc gcagaggcta 840
aatttatcag tgaggggac aagattgtgg atctgatcaa aaagagagat gtggaaggca 900
ttgaggcgct catcacaaac gccgaggtcg aaaaacggat cttggacaga cttctggaga 960
agggaagggc gtatggaaca gacccgacac taaagttcac gcagcacatt cagagcaagg 1020
tgaagcccga ggtgattgtg aaaatctaca aggatttcgt gattccgctc acgaagaagg 1080
tcgaagtcga ctacttgctg agacggctgg aggacgagga ggacgatgat gcgacgcaga 1140
aaagcggcgg ctacgttgac cggtttctct cctctggctt gtactagaaa ttaaaatttt 1200
cagtacttta attattctcg aattctagtt cagataccgc atggtaattt caaaggccag 1260
aaaagtggcc gcgttggctg gggcagctct cagaatagtc ggcgagaatc ctttgactag 1320
cccccaggca ccgctctgtc tccaaatacc cctaatagtc tcaacagcat ttctataaac 1380
cagcttcttg tagttgtccg tctgcatgtt ggacttgatc acatcgatcg gataaatact 1440
gaaccacatc ccgtaacctg ccagcgcccc aaagacgcag agcttccagt tctcgatgtc 1500
cttcctggca atattccgcg actcgatctc gtttttcacg agagcttcaa aagtcagaaa 1560
atacgctccg ctacccaaac tttctcttgc cagcgtaggt cccagacccc ggtagattaa 1620
cttgatgcct cccgtatggt acagcttctt gatcc 1655